IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (Previously Presented): A method for control of an internal combustion engine to regenerate an exhaust-gas purifying mechanism disposed on an exhaust line of the engine, comprising:

analyzing a composition of exhaust gases by an oxygen sensor situated solely downstream from the purifying mechanism during a phase of regeneration of the purifying mechanism; and

creating a signal for control of the engine based on the analysis to modify the composition of the exhaust gases upstream from the purifying mechanism so that an output signal from the oxygen sensor reaches a setpoint value immediately after the start of the regeneration phase and substantially maintains the setpoint value through the end of the regeneration phase.

Claim 12 (Previously Presented): A method according to claim 11, wherein the oxygen sensor is of all-or-nothing type.

Claim 13 (Previously Presented): A method according to claim 11, wherein an operating temperature of the oxygen sensor is controlled.

Claim 14 (Previously Presented): A method according to claim 11, wherein an output signal of the oxygen sensor is compared with a reference value, and a control signal is created

to reduce the difference between the output signal of the oxygen sensor and the reference value.

Claim 15 (Previously Presented): A method according to claim 14, wherein an end stage of the regeneration phase is detected based on the control signal.

Claim 16 (Previously Presented): A control device for regeneration of an exhaust-gas purifying mechanism disposed on an exhaust line of an internal combustion engine, comprising:

a control module configured to modify fuel injection; and

an oxygen sensor disposed on the exhaust line directly downstream from the purifying mechanism;

wherein, during a phase of regeneration of the purifying mechanism, the control module is configured to cause a modification of a composition of exhaust gases solely as a function of an output signal of the oxygen sensor so that an output signal from the oxygen sensor reaches a setpoint value immediately after the start of the regeneration phase and substantially maintains the setpoint value through the end of the regeneration phase.

Claim 17 (Previously Presented): A device according to claim 16, wherein the oxygen sensor is of all-or-nothing type.

Claim 18 (Previously Presented): A device according to claim 16, further comprising a controller configured to control an operating temperature of the oxygen sensor.

Claim 19 (Previously Presented): A device according to claim 16, further comprising a detection module configured to detect an end of a regeneration phase as a function of a control signal produced by the control module.

Claim 20 (Previously Presented): A device according to claim 16, wherein the purifying mechanism comprises a nitrogen oxides trap.

Claim 21 (Previously Presented): A device according to claim 16, wherein the control module produces a control signal which is zero prior to the start of the regeneration phase, reaches a first control value immediately after the start of the regeneration phase and substantially maintains this value until the end of reduction of nitrogen oxides by the purifying mechanism, then reaches a second control value, which it substantially maintains until the end of the regeneration phase.

Claim 22 (Previously Presented): A device according to claim 16, wherein the control module controls an air intake valve.

Claim 23 (Previously Presented): A device according to claim 16, wherein the control module controls an air intake valve and at least one fuel injector.

Claim 24 (Previously Presented): A device according to claim 16, wherein the control module controls at least one fuel injector.

Claim 25 (Currently Amended): A method according to claim 11, ~~further comprising producing a control~~ wherein the signal ~~in a~~ for control ~~module which~~ is zero prior to the start

of the regeneration phase, reaches a first control value immediately after the start of the regeneration phase and substantially maintains this value until the end of reduction of nitrogen oxides by the purifying mechanism, then reaches a second control value, which it substantially maintains until the end of the regeneration phase.

Claim 26 (Previously Presented): A method according to claim 11, wherein the signal controls an air intake valve.

Claim 27 (Previously Presented): A method according to claim 11, wherein the signal controls an air intake valve and at least one fuel injector.

Claim 28 (Previously Presented): A method according to claim 11, wherein the signal controls at least one fuel injector.